



to Successful IA Training and Certification for IAM-II Personnel

A Candidate Roadmap to IT Certification

*So You Want to be a
Certified Information Systems
Security Professional?*



to Successful IA Training and Certification for IAM-II Personnel

Information Assurance Training and Certification – Forward

You heard about *IT* for several years.

You wondered how *IT* would affect you?

You debated *IT* with your peers!

**Well, *ITs* here...and *IT* affects
you and your career!**



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to Successful IA Training and Certification for IAM-II Personnel

Information Assurance Training and Certification – Overview

What is the IA Training and Certification Program?

1. On 15 August 2004, the Department of Defense (DoD) released DoD Directive 8570.1, Information Assurance Training, Certification and Workforce Management. This directive served as the first step in the DoD implementation of proposed Federal Information Technology Training and Certification guidelines. This program was born of the realization that, in order for the U.S. Government to adequately secure and defend Information Systems and Networks, IT personnel, whose duties include Information Assurance (IA) functions, must be properly trained and academically proven, via commercial IT certification. The primary intent of the directive states: *“Privileged users and IA managers shall be fully qualified, trained, and certified to DoD baseline requirements to perform their IA duties....The status of the DoD Component IA certification and training shall be monitored and reported as an element of mission readiness and as a management review.”*
2. On 28 February 2006, the U.S. Army CIO/G-6 published the first version of the Information Assurance Best Business Practice (IA-BPP) – IA Training and Certification, Version 2.0. Released as an addendum to AR 25-2 (Information Assurance), it serves as the Army’s implementation plan and states: *“To support the warfighter in a highly effective and professional manner, the Army must ensure that appropriate levels of IA awareness, training, education, certification, and workforce management are provided to the IA workforce and IS users that commensurate with their respective responsibilities.”*
3. What is the bottom line? The pace of Information Technology evolution is both rapid and ceaseless. While this techno-evolutionary process continues to be harnessed and refined for the benefit of the U.S. Government and its citizens, there coexists a segment of the world’s population who choose to utilize it for the purpose of furthering criminal, terrorist, and subversive activities. Therefore, it is imperative that the U.S. Government IT Professionals entrusted with the management of the national infostructure possess technical skills, knowledge, and abilities that are on par to those of their commercial industry peers and equal or superior to those of would-be adversaries.



Information Assurance Training and Certification – Overview (*Continued*)

Who mandated training and certification?

(1) IA Best Business Practice (BBP) #05-PR-M-0002, dtd. 09 Mar 07; (2) Army Transition Plan for the Training and Certification Tracking System, Version 1.1, dtd. 17 Oct 07; (3) AR 25-2 (Information Assurance); (4) DoD Directive 8570.1 (IA Training, Certification and Workforce Management); (5) DoD 8570.01-M (IA Workforce Improvement Program) (*See Appendix A for additional references.*)

Why is this being mandated?

To ensure that personnel appointed to IA-related duties obtain and maintain the technical and security-related skills necessary to install, configure, maintain, and trouble-shoot U.S. Government Information Systems, in support of the overall success of the Information Assurance Program. Ultimately, public trust will increase exponentially, if citizens are confident that U.S. Government electronic Information Systems are safe and secure.



How is the program structured?

Personnel with IA-related duties are categorized into two basic categories: (1) Information Assurance Management and (2) Information Assurance Technical. These categories are further subdivided into Levels I, II, and III. Each category provides for several certification options. DoD 8570.01-M also provides for two additional, specialty categories and subsets known as CND and IASAE. In some cases, personnel may fall into both an IAT category and the IASAE category. Refer to Appendix C for detailed descriptions of the aforementioned categories.



to Successful IA Training and Certification for IAM-II Personnel

Information Assurance Training and Certification – Overview *(Continued)*

Table 1 – DoD Baseline Certification Options for Garrison DOIM Personnel

Level	Designated Personnel	Certification Options	Recommended Certification
IAM-I	Directorate/Tenant IASOs	Security+, GISF, GSLC	Security+
IAM-II	Installation IAM and Alternate	CISSP, CISM, GSLC	CISSP
IAM-III ¹	Regional IAPM	CISM, GSLC, CISSP	N/A
IAM-II	Installation IAM and Alternate	CISSP, CISM, GSLC	CISSP
IAT-I	IT Desktop Support Technicians	A+, Network+, SSCP	A+
IAT-II	Installation IANM, IANO, SA/NA	Security+, GSEC, SCNP, SSCP	Security+
IAT-III ¹	Regional IANM	CISA, CISSP, GSE, SCNA	N/A
IASAE-I, II, & III ²	System Architects and Network Engineering Personnel ³	IASAE-I & II: CISSP (or Associate) IASAE-III: ISSEP or ISSAP	CISSP
CND-SP ^{1,2}	CND-A, CND-IS, CND-IR, CND-AU, CND-SPM Personnel	CND-A: GCIA; CND-IS: SSCP; CND-IR: GCIH, CSIH; CND-AU: CISA, GSNA; CND-SPM: CISSP-ISSMP, CISM	N/A

¹ No local requirement exists for the category and related certification at the Installation level.

² Personnel may simultaneously be categorized in IAM/IAT levels and IASAE/CND-SP categories and, as a result, be required to obtain separate certifications to fulfill minimum requirements.

³ IASAE-II category is the only one staffed at the installation level.



Information Assurance Training and Certification – Overview (Continued)

Why are these certification options recommended?

Though several certification options exist, within each IAM/IAT/IASAE/CND-SP category, recommendations were formulated and incorporated into Individual Development Plans and Performance Objectives, based on several considerations. These include:

- 1) Industry Recognition: The certifications chosen represent the most well-known and respected ones, throughout the Information Technology industry. Therefore, personal Return on Investment, based on time and effort spent by personnel, is maximized.
- 2) Availability and Quality of Training: Training materials (e.g. computer-based training, publications, etc.) for candidates seeking well-known certifications are far more numerous than those of lesser-known certifications. In the case of the CompTIA Security+ and CISSP certifications, Common Body of Knowledge (CBK), resident courses are conducted by the Army School of Information Technology, at Fort Gordon, GA, to better prepare personnel, prior to certification testing.
- 3) Improved Academic Preparation Opportunities: Uniform certification options provide for the opportunity for the creation of small study groups, composed of organizational personnel. This method allows candidates to focus on a single, standard set of objectives, which are uniform in weight of importance and presence on the actual certification examination.
- 4) Program Performance Assessment: By applying a uniform certification process, organizations can better assess, through statistical and trend analysis, the effectiveness of training offered in preparation for certification testing. Resultant trends can then be used to recommend changes to the CIO/G-6 to increase the quality and/or quantity of training opportunities provided, in order to increase the overall percentage and rate of speed of compliance with certification requirements.



to Successful IA Training and Certification for IAM-II Personnel

Information Assurance Training and Certification – Overview (Continued)

Into which category do I fall?

Based on your management/technical duties within the IA Program, you occupy an ***IAM Level II*** position. What does IAM Level II mean? It means you are an Information Assurance Manager (IAM) who is responsible for the management aspect of their organization's computer and network security and oversees the implementation and sustainment of mandated IA policies and procedures. It may also apply to personnel designated as ***IASAE I/II/III***, who are responsible for the secure architectural and engineering design of U.S. Government networks. Additionally, it means you play a key role in the implementation and sustainment of the Army's Information Assurance Program. Accordingly, you must be trained and certified to complete these duties!

What do I have to do?

Complete all training requirements for your level and successfully pass the commercial certification exams required to obtain the credential of Certified Information Systems Security Professional (CISSP)¹

When do I have to be certified?

Currently employed personnel must be fully trained and commercially certified by 31 December 2010 . Thereafter, new, Military, Civilian, and Contractor personnel must be certified within (6) months of appointment.

What happens if I don't comply?

Personnel who do not meet minimum requirements within the required timeframe above must have their privileged access (e.g. Local/Network Administrator Access) rescinded. Non-compliance also reflects negatively on Army organizations, since IT Training and Certification is a reportable measure at the Army level (e.g. CLS, IT Metrics, etc.) and DoD level (e.g. IA Workforce Implementation Milestone Budget Plan and Annual IA Workforce, Training, Certification, and Management Report). Ultimately, this statistical data will be used to compile reporting to the U.S. Congressional level, on an annual basis.

¹CISSP certification requires the completion of the proctored ISC2 CISSP Exam.



to Successful IA Training and Certification for IAM-II Personnel

A Candidate Roadmap to IT Certification



Ten Simple Steps to IT Certification



to Successful IA Training and Certification for IAM-II Personnel

Information Assurance Training and Certification – A Candidate Roadmap to IT Certification

Table 2 – U.S. Army Certification Process Steps

TEN SIMPLE STEPS TO IT CERTIFICATION

- ☐ **Step 1** – Acknowledge Reality
- ☐ **Step 2** – Registering in Army Training & Certification (ATC) Tracking System
- ☐ **Step 3** – Meaning, Requirements, and Benefits of Certification
- ☐ **Step 4** – Completion of Training Requirements
- ☐ **Step 5** – Studying, Studying, and More Studying
- ☐ **Step 6** – Completing the Preassessment
- ☐ **Step 7** – Requesting Vouchers
- ☐ **Step 8** – Scheduling and Completing Examinations
- ☐ **Step 9** – Updating the ATC and Notifying the Information Assurance Manager (IAM)
- ☐ **Step 10** – Certification Sustainment Training



to Successful IA Training and Certification for IAM-II Personnel

A Candidate Roadmap to IT Certification



Steps 1 & 2

Acknowledging Reality and Registering in ATC



Steps 1 & 2 – Acknowledging Reality and Registering in the ATC

1. Step 1 & 2 are completed by registering in the ATC website. When registering, you are required to complete a survey, which determines the IAM or IAT category into which you fall. If you are an IAM-II and your survey results categorize you as an IAM-III, complete the survey again and until such time that you are categorized correctly.
2. When registering, ensure you put the right organizational information, region, etc. When in doubt contact the IA Policy Management Branch for assistance. If you erroneously fall into the wrong hierarchy, the DOIM cannot see you or your progress!
3. Once you are registered, the IAM or IAPM will validate and approve the information you entered. From there, the clock starts ticking toward the mandatory compliance date.
4. Your training requirements will be automatically generated, based on your IAM/IAT categorization. When training is completed via Army E-Learning or the IA Training website (see Appendix D), the results will automatically feed into your ATC profile.
5. Training completion may take up to two weeks to reflect in the ATC. If training completion has not accurately reflected after three weeks, contact ATC personnel, via link provided in the website, to report the problem.



A Candidate Roadmap to IT Certification



Step 3

Meaning, Requirements & Benefits of Certification

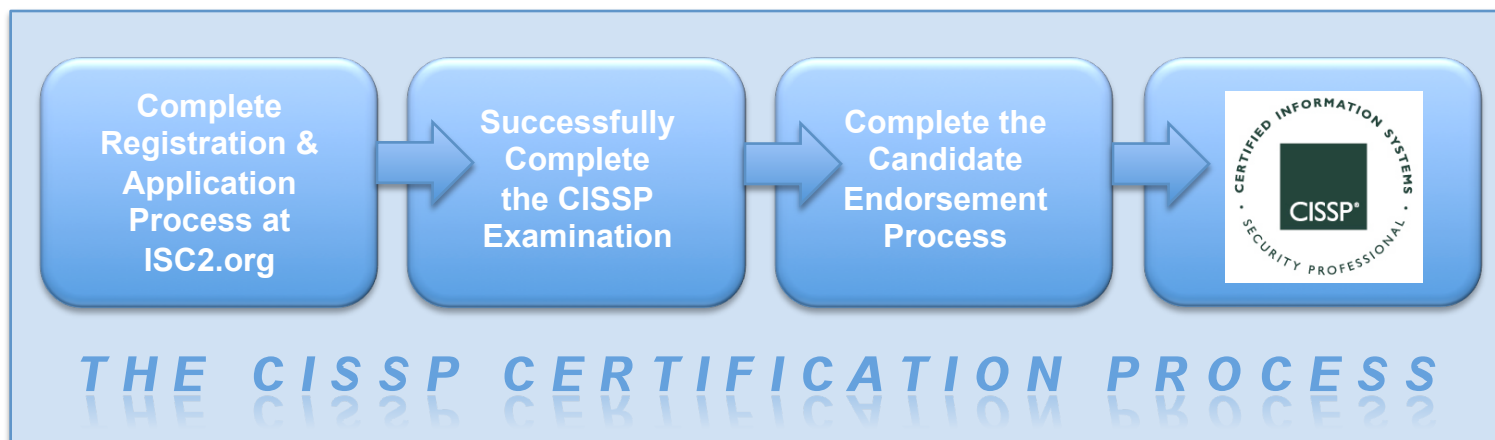
Step 3 – Meaning, Requirements, & Benefits of Certification

1. The Certified Information Systems Security Professional® or CISSP, as it is one of the premier IT certifications relating to Information Security. Recognized world-wide as a credential of true excellence, its members are responsible for computer and network security at some of the world's largest and most respected companies and non-profit organizations. The International Information Systems Security Consortium describes it as:

"(ISC)² provides two international certifications, the Certified Information Systems Security Professional (CISSP) and the Systems Security Certified Practitioner (SSCP). (ISC)²'s certification process validates candidate expertise to develop information security policies, standards, and procedures as well as manage the implementation across the enterprise."¹

2. To obtain CISSP certification, a candidate must successfully complete the process illustrated in Table 3, below.

Table 3 – CISSP Certification Process



¹ISC2 Website 2008; <https://www.isc2.org>



Step 3 – Meaning, Requirements, & Benefits of Certification *(Continued)*

3. The CISSP certification is more than just an acronym for one's signature block, business card, and resume. When given a choice between two IT professionals with equivalent years of experience, a customer or hiring organization will most likely choose the one with the commercial IT certification. The fact that the certification is that of the CISSP certification only makes the candidate that much more desirable!

4. Why? It's because your professional certification instantly communicates to companies, other IT professionals, and educated customers that you not only possess years of experience but also have taken the time to academically validate the knowledge you apply on a daily basis. Moreover, possessing the CISSP certification is a testament to your true commitment to excellence, based on the time you invested in seeking in-depth knowledge of all (10) domains of the Information Technology arena.

Table 4 – CISSP Domains

CISSP Domains of Concentration ¹	
Information Security & Risk Management	Business Continuity & Disaster Recovery Planning
Access Control	Telecommunications & Network Security
Cryptography	Applications Security
Physical (Environmental) Security	Operations Security
Security Architecture & Design	Legal, Regulations, Compliance, & Investigations

¹Domain coverage is not subdivided into percentages by (ISC)². *Copyright © 2008 (ISC)², Inc. All rights reserved.*

5. Does the scope of information seem large? It is! Remember, this is the premier Information Security-related certification, respected by companies around the world. You will need to be a subject matter expert in "all things IT". You will definitely want to begin studying (4-6) months ahead of time, so get organized with a study plan because you'll only want to take this one once. A sample plan for CISSP candidates is provided in Table 5.



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Step 3 – Meaning, Requirements, and Benefits of Certification *(Continued)*

Table 5 – Sample IT Certification Study Plan for CISSP Candidates

Phase	Description	Remarks
1	Complete the IASO and E-Learning Security+ ¹ Courses.	Completion of these courses provides the candidate with a solid foundation of fundamental security concepts, prior to completing the E-Learning CISSP course.
2	View the flash-based, CISSP Test Overview at CCCure.org to become familiar with the test format and knowledge required. ² Cross-reference and complete E-Learning module preassessments for each domain.	Allows the candidate to better understand the test format/content and identify their knowledge within the domains. This will preliminarily assess the candidate's strengths/weaknesses and the amount of concentration required for each domain.
3	Using correlations drawn in Phase 2, read applicable chapters/sections from at least (1-2) different study books. <i>(Note: Candidates who find more than 25% of the subject matter to be "new knowledge" should conduct additional study, prior to completing the related, E-Learning course modules.)</i>	May include both textbooks or electronic books. Books 24x7® is available free-of-charge, via Army E-Learning, and allows for on-line reading. Candidates who prefer to printed material may purchase similar titles at their local bookstore.
4	Complete the E-Learning course module for the respective preassessment (Phase 2) and subject matter read (Phase 3).	The preassessment and self-study better allows key concepts to be more quickly learned and better retained.
5	Complete the E-Learning course module post-assessment relating to the information reviewed in Phase 3 and studied in Phase 4.	Post assessment results allow the candidate to identify if further concentration is necessary within this objective.
6	Repeat Phases (2-5) for each domain of concentration, until all course modules are completed and mastered at a 95% or greater. Set a goal to complete the entire CISSP course within (1 – 1 ½) months.	Upon completing all course modules, the candidate should be prepared to enter a period of group/self-study. Completing the required courses within (1 – 1 ½) months will allow the candidate (2 ½ - 3 months) of self-study time during Phase 7 and in preparation for Phase 9.
7	Upon completion of required training, conduct self-study (1-2) hours daily and, if possible, group study (1-2) times per week, for (2-3) month period. Customize the CCCure online testing engine to complete practice exams for one domain at a time, at least (4) times weekly. ¹	Group and self-study can assist in reinforcing key concepts. Source material may include Books 24x7, reputable study websites, and personally purchased printed materials. CCCure testing engine is one of the most comprehensive and well-known sources for CISSP candidates and should be practiced regularly.
8	Complete official, U.S. Army Preassessment Testing approximately (1 ½-2) months prior to CISSP CBK Course. Request exam voucher approximately (1) month prior to course attendance.	This is a requirement for all personnel requesting exam vouchers. Visit https://atc.us.army.mil/iastar/preassessment_info.php for detailed information.
9	Attend the CISSP Common Body of Knowledge (CBK) Course, Fort Gordon, GA. Conduct test preparation using CCCure test engine.	Conduct the final (2) weeks of self-study in an academic environment (daytime) and practice testing (evenings/weekend). Focus on weakest areas, as determined through the full course of study.

¹Security+ Course is not a requirement but is recommended to lay foundational groundwork for more comprehensive CISSP courses.

²Available on CCCure website and recognized as one of the foremost sources of study for CISSP candidates.



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Step 4

Completion of Training Requirements



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Step 4 - Completion of Training Requirements

1. Minimum training requirements for the program are listed below. Additional training may be required, depending upon the candidate's level of knowledge and experience:

a. IASO Online Course - Designed to equip personnel with a basic understanding of computer security policies and their role and responsibility in the oversight and enforcement of practices and procedures necessary to successfully execute the IA program. Training Source: <https://ia.gordon.army.mil/iaso>

b. CIO/G-6 Information Assurance CISSP - Modules are designed to educate personnel on basic computing, networking, and telecommunications concepts contained within (10) domains of concentration, as outlined and governed by ISC². Training Source (CBT): <https://usarmy.skillport.com>, Search Query: LP34;

c. CD ROM, DoD Certifier Fundamentals - Training is intended to prepare personnel to plan and oversee the DIACAP accreditation process. Training Source: <http://iase.disa.mil>

d. CISSP CBK Resident Course, Ft. Gordon, GA¹ - The resident course is designed to augment knowledge acquired in the Army E-Learning CISSP course, which is a prerequisite for course registration. This course is designed to be the final phase of candidate preparation and should only be scheduled when a candidate has completed (4-6) months of study. (ISC)2 proctored exam is held on the last day of the course. Personnel planning to take the exam on-site should request their voucher approximately one month prior to attendance, to allow for adequate time to complete the CISSP registration requirements. Training Source (Resident): <https://ia.gordon.army.mil/CISSP>

2. Based on the comprehensive content covered by and the known difficulty of the CISSP exam, candidates should not rely on the required courses as their sole sources of study. Additional training and studying will be required, to maximize the candidate's chances of passing the exam on the first attempt. Links to additional training sources are provided in Appendix D and should be used to the maximum extent possible.

¹Resident CBK course is a local requirement for Fort Buchanan personnel, based on the following: (ISC)2 does not currently offer the CISSP examination in Puerto Rico. In the interest of cost-savings and based on the convenience provided by the Fort Gordon CKB, personnel should plan to attend the CBK, as their final phase of study, and register for the proctored examination held at Fort Gordon, on the last day of each course. Failure to do plan and study accordingly may result in the unavailability of funding to send candidates TDY, for the sole purpose of completing the examination.



to Successful IA Training and Certification for IAM-II Personnel

A Candidate Roadmap to IT Certification



Step 5

Studying, Studying, and More Studying



Step 5 – Studying, Studying, and More Studying

1. Unofficial sources estimate that there is a 30% failure rate, for first-time candidates. This means that there is a 70% pass rate! There is no shame unless the candidate knowingly underestimates the difficulty of this exam. Commercial IT Certification testing is designed to be difficult in order to objectively measure the candidate's subject matter expertise and ensure the continued integrity of the credential. This is a premise that (ISC)2 takes very seriously, and, as a result, they have a pool of thousands of questions, which are randomly chosen for the 250 question, CISSP exam.
2. As stated previously, one source of study is not sufficient to master all of the domains covered in the CISSP certification process. A prepared candidate will use at least (2-3) different sources and a combination of self and group study to prepare for first-time success. This may include a combination of computer-based training, electronic books, technical whitepapers, practice exams, textbooks, flash-cards, etc.
3. **Repetition = Retention**: Total preparation time should be from (4-6) months, depending upon the candidate's previous experience, study habits, etc. Candidates who want to be expertly prepared will dedicate at least (1-2) hours daily, five times per week. Breaks in the study routine for more than one week (e.g. vacation) should be avoided, if at all possible.
4. Candidates should avoid "Study Guides" available for purchase on websites around the internet that make false guarantees and purport 100% pass rates. Many are considered to be "Brain Dumps" that may contain copyrighted material. Aside from the fact that it constitutes a violation of (ISC)2 Ethic Policies, these publications are rendered useless based on the strict confidentiality maintained by (ISC)2 through its proctored, written test format.
5. Many reputable websites do exist which provide discussion forums and study materials. The key is to find a legitimate one that provides correct information. Forum websites are often a good venue to post questions about specific objectives, technical details, etc. Other forum members are usually certified or are, themselves, candidates, which makes the medium a "virtual study group" of sorts!
6. **The Bottom Line**: Memorizing and learning information are two completely different things. Certification is intended to enhance the performance of IT Professionals, accelerate professional development, and increase organizational productivity and effectiveness. What one gets out of it depends upon what they put into it!



A Candidate Roadmap to IT Certification



Step 6 & 7

*Completing the Preassessment &
Requesting Vouchers*



to Successful IA Training and Certification for IAM-II Personnel

Steps 6 & 7 – Completing the Preassessment & Requesting Vouchers

Ready to request your voucher?

Wait, there's one more task to complete. Upon completion of all required training and the self-study period, individuals must complete the official Army Preassessment Examination that corresponds to their certification requirement.

What are the requirements?

Active Duty and DA Civilian personnel are eligible to request vouchers. The IA Training and Certification BBP states that these personnel must complete the preassessment, prior to requesting an exam voucher. Contract personnel will have their examination fees paid by their employing company but should complete the preassessment to validate their preparedness, prior to testing.

*Don't worry....You're
Almost There!*

Keep Studying!



What is a voucher, and how do I benefit from it?

It is a coupon purchased by the government that allows you to take the certification examination, at no personal financial cost. When you register for the examination, you enter the voucher number as the payment option. The benefit is enormous! IT Professional Certification examinations range in price from \$80 to \$500, depending upon the credential. This price does not include costs paid for computer-based training, study-related textbooks, etc. Basically, training and certification costs are being paid in full, for an IT certification that benefits and follows you for the rest of your career!

How do I complete the preassessment and voucher request process?

Instructions on preassessment testing, as well as the voucher request form, for Army personnel can be found on the ATC website at https://atc.us.army.mil/iastar/preassessment_info.php.



A Candidate Roadmap to IT Certification



Step 8

Scheduling and Completing Examinations



Step 8 – Scheduling and Completing Examinations

What do I do when I receive the voucher?

Once you receive the voucher, you have (60) days to use it, as per guidance detailed in the Army Transition Plan for the Training and Certification Tracking System. For this reason, make note of the date of issuance. The next step is to study for a (1-2) more weeks to ensure you are adequately prepared. When you are certain, register for the exam.

How do I register for the exam?

Exam registration for (ISC)2 exams is handled through their website. Candidates must complete an application form, which validates their career experience, education, etc., in order to ensure they meet minimum prerequisites established for each area. Once the candidate has completed this, they will locate and select the exam site. The exams conducted at Fort Gordon are listed. Once the site has been selected, the candidate will enter their demographic information. The candidate will need their voucher number to complete this process, since this serves as the “form of payment” When the scheduling/voucher transaction is finalized, there are very few justifiable reasons to cancel or reschedule. Therefore, be certain you choose the exam date which corresponds to the CISSP CBK you are scheduled to attend.

Where is the nearest testing center?

For candidates in Puerto Rico, the nearest testing center is Miami, FL. Why? (ISC)2 does not currently offer the test in Puerto Rico. For this reason and in order optimize candidate preparedness, Army IAM-II and IASAE I/II/III personnel in Puerto Rico are highly encouraged to attend the CISSP CBK and exam conducted at Fort Gordon, GA. Refer to Step 4, for detailed information.

Step 8 – Scheduling and Completing Examinations *(Continued)*

What do I have to take to the exam?

Candidates must show (2) forms of valid, photo identification (e.g. drivers license and DoD CAC) and present their examination registration confirmation, which will include their candidate number. Materials such as notebooks, backpacks, etc. must be surrendered. The test proctor will collect and store any items in your possession. Based on the long duration of the exam, candidates should also take snacks, bottled refreshments, etc.



What will the testing process be like?

After verifying your identity and reviewing your registration information, the proctor will require you will be required to sign-in. You will then be required to sign a candidate non-disclosure agreement. The proctor will pass out sealed exam booklets, which will opened upon their instruction, and note-taking materials. Once opened, you will fill in basic demographic information and your candidate number. Once the administrative matters have been completed, you will be given (6) hours to complete the exam. Exam questions are answered, on a “Scantron” form, which is separate from the test booklet. Upon completing the exam, the candidate should ensure all circles are filled in and that no extraneous or “smudge” marks exist on the form. The candidate will then turn all materials into the proctor. Personal materials are then returned and the “excruciating” waiting process begins!



Step 8 – Scheduling and Completing Examinations *(Continued)*

What is going to be on the exam and how long do I have?

Table 6 – CISSP Exam Format

Number of Test Questions	250 <i>(Note: Only 225 questions are scoreable. The remaining 25 are (ISC)2 “test” questions.)</i>
Testing Format	Proctored, classroom exam in which candidates use a booklet with questions and fills in answers on a “Scantron”.
Question Distribution	Questions from each domain area are randomly chosen and distributed throughout the exam. Some questions may be “cross-domain” in nature. Questions are weighted differently, based on their complexity.
Maximum Time Allowed	6 Hours
Passing Score (Scale of 100-900)	700
Notes¹	This test is both a mental and physical one, based on the complexity of questions, their scope, and the lengthy duration of the exam. Questions are multiple choice (4 options) and require the candidate to select the “best” answer from the options provided. Questions left blank by the candidate count against their final score. Twenty-five questions will not be scored, but the candidate does not know which ones they are.
¹ Refer to Table 8 for more detailed information regarding tips on successfully completing the CISSP examination.	

What happens when I finish?

Candidates are not immediately notified if they passed or failed. Candidates must wait from (5) days to (3) weeks to be notified, via email, of their results. What one can be certain of is that they will be mentally and physically drained. Plan ahead to do something relaxing upon completion, so that you can transition back to reality. Most candidates feel like the majority of questions on their exam were from their weakest area. Once it’s over, don’t spend time worrying if you passed or failed. If you know you prepared at the 110% level, you can do nothing but positive, until the results arrive!



Step 8 – Scheduling and Completing Examinations *(Continued)*

What is next after passing the exam?

Once the email notification stating that exam was passed successfully, candidates will be given instructions on how to download, complete, and submit a Candidate Endorsement Form. This is a document verifying the experience, education, etc. you provide when registering for the exam. The verifying official can be the DOIM Director. Once the submitted endorsement form has been reviewed and approved, you will receive another email message notifying you that the process has been completed. At this point, your Candidate ID converts to your Member ID. You will then be able to log into the (ISC)2 member website. Thereafter, you will receive your certificate, member card, and welcome materials, within (4-6) weeks. After the entire process is completed, you should familiarize yourself with the annual Continuing Professional Education (CPE) requirements for CISSP members by visiting the (ISC)2 member website.

To whom do I need to provide my results?

At a minimum, you need to notify the IAM and your supervisor. The method by which you notify them is dependent upon whether you passed or failed the exam. If you successfully passed the exam, Step 9 will explain how you can officially notify the IAM, your supervisor, and whomever else you would like. If you didn't pass the first time, you'll need to follow the retraining process, prior to being allowed to test a second time.

What if I don't pass it the first time?

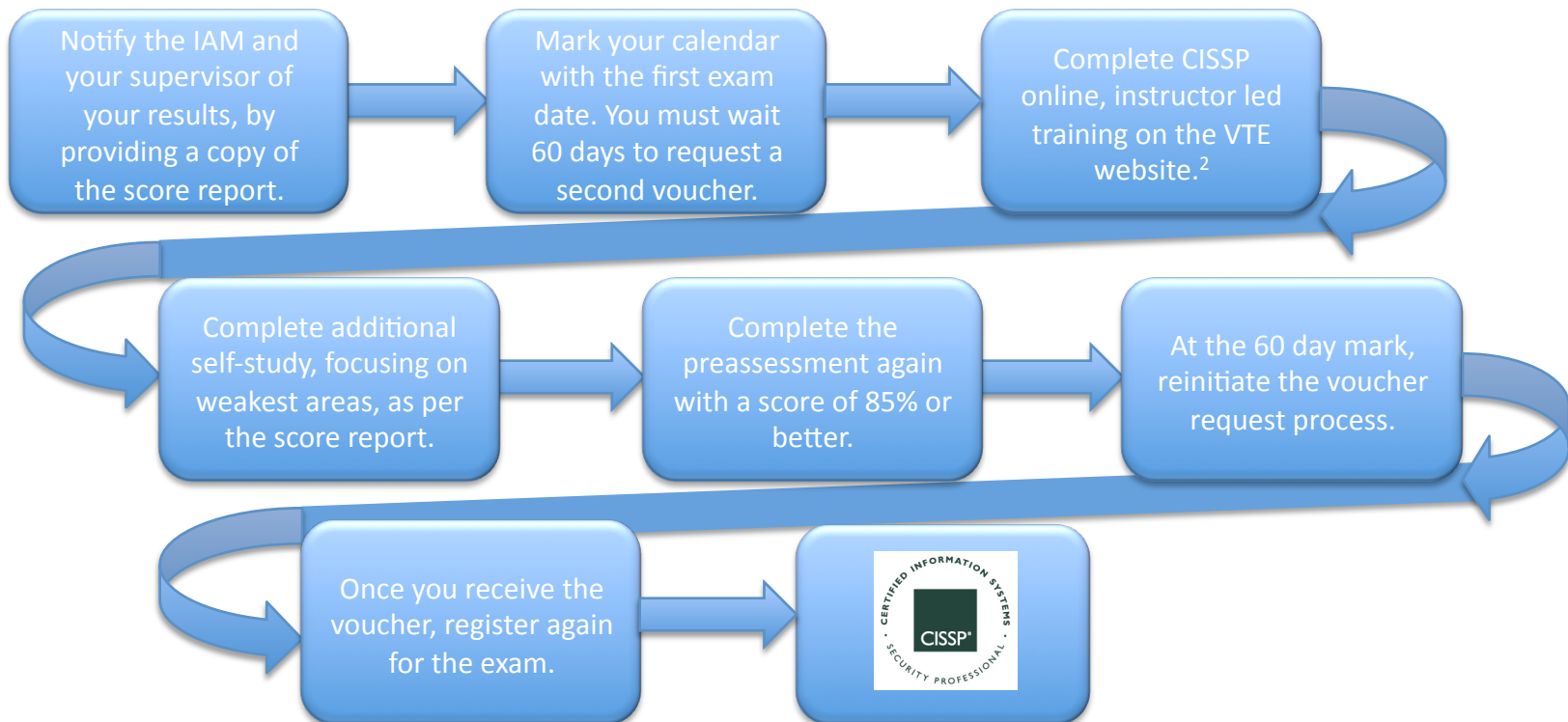
First of all, take a deep breath! If you don't pass the first time, don't despair. Many people don't pass the CISSP exam on the first attempt. Candidates who do not pass the CISSP exam will receive a score report, which details how they did, by domain. Review your score report carefully, since it is your most helpful tool in formulating a renewed plan of attack. DoD and DA policy provides for this possibility in and provides a second chance, via retraining retesting process. See *Table 7 – Retraining and Retesting Process for CISSP Candidates*.



to Successful IA Training and Certification for IAM-II Personnel

Step 8 – Scheduling and Completing Examinations *(Continued)*

Table 7 – Retraining and Retesting Process for CISSP Candidates¹



¹See detailed retraining requirements for 2nd Security+, Network+, A+, and CISSP Vouchers at https://atc.us.army.mil/iastar/retraining_requirements_for_2nd_vouchers.doc

²See Appendix D for VTE website overview and URL.



Step 8 – Scheduling and Completing Examinations *(Continued)*

Table 8 – CISSP Test-Taking Tips

<i>Helpful Tips for CISSP Candidates</i>	
<p>Beginning approximately (2) weeks ahead of the exam. Make a “Cheat Sheet” with the information you find the most difficult to remember (e.g. cryptography types, OSI/TCP Model, risk management formulas, etc.) Rewrite the “Cheat Sheet” every day, leading up to the exam. When the proctor begins the test, immediately rewrite your “Cheat Sheet” on the note paper provided. This will ensure that when you get to a “hard” question several hours into the exam, you don’t have to dig deeply within your brain to try and remember your weakest areas of knowledge!</p>	Avoid cramming the night before the exam. If you studied the domains, based on your strengths and weaknesses, a quick review during the afternoon before the exam should suffice.
	Review the (ISC)2 Code of Ethics for a few nights, leading up to the exam. These are testable!
	Get a good night’s sleep and eat a healthy breakfast.
Avoiding scheduling your return from TDY on the date of the exam. Though the exam may not take you (6) hours to complete, you do not want to risk feeling rushed.	Arrive 15-20 minutes early, so you have time to park, use the restroom, etc.
Take “power snacks” and bottled refreshments to keep yourself energized. There is no lunch break!	Take a five-minute break every (45-60) minutes to refresh yourself.
Take it slowly. You have plenty of time if you studied well and know the material, within each domain.	Don’t become agitated if the questions look strange. They will look different than those seen on practice exams. What is important is that you learned the subject matter, not the sentence structure!
Look at the question and possible answers as the only possibilities. The correct answer is the best one of the options provided in the test booklet.	Answer questions that you know first. Make a list of skipped questions to return to at the end, on the note paper provided.
Avoid leaving smudge marks by completely erasing any corrections on the answer sheet. Ensure all circles are filled in completely.	If time allows, revisit any questions you left blank marked for review. Be careful about changing answers, though, since your “gut” reaction is often the correct one!
Before turning in your exam materials, be sure that you left no questions blank and that your demographic information is filled in correctly.	If the exam takes the entire time provided and the proctor notifies you that there are (5) minutes remaining, fill in any answers that are incomplete. A blank question will be marked against you, so its better to make a guess that has a 25% chance of being correct!



to Successful IA Training and Certification for IAM-II Personnel

A Candidate Roadmap to IT Certification



Step 9

Updating the ATC and Notifying the IAM



Step 9 – Updating the ATC and Notifying the IAM *(Continued)*

Congratulations!

If you've made it to this step, it means you successfully passed the CISSP exam. Whether you did it on the first or the second try, you have succeeded in validating your years of experience through your academic performance! The next step is to let the world know...

How do I notify the IAM of my results?

Official verification of a candidate's credentials can be queried via the (ISC)2 member website at <https://webportal.isc2.org/custom/certificationverification.aspx>. Provide this link to the IAM or IAPM, once you have verified that your results are reflected therein. These results are official and in the interest of prompt reporting and compliance reflection, do not wait until receiving the CISSP certificate to notify the IAM. Additionally, you may use this method to notify your supervisor or whomever else you choose.

What do I need to update in my ATC profile?

When you log in to the ATC website, your profile will list your certification requirements options in a table near the top of the page. Below this table, select "Add a Certification". On the next screen, select the certification completed from the drop-down menu. Next enter the date it was completed and select "Add". CISSP holders must enter their (ISC)2 member number. Once you receive your certificate via mail, you should scan and attach it to the record entry, via upload. In the interim, the IAM can still validate your compliance using the credential verification method described in the "How do I notify the IAM of my results?" section, above.



to Successful IA Training and Certification for IAM-II Personnel

A Candidate Roadmap to IT Certification



Step 10

Certification Sustainment Training



Step 10 – Certification Sustainment Training

What do I have to do to maintain my certification?

(ISC)2 certifications, such as the CISSP, require an annual maintenance fee of \$85.00. Once you have registered the information in your ATC record, Army records should be provided to DoD, who currently pays annual fees for CISSP holders. Additionally, you must complete a minimum of (120) hours of CPEs, every three years. This amount is broken down with a minimum required, toward this amount, on an annual basis. The (ISC)2 member website provides more detailed information regarding these requirements.

What sustainment training is required?

The Army BBP delineates required refresher training, which must be completed every (18-24) months for personnel in the position of IAPM, IANM, IAM, IASO, IMO, ISO, SA/NA, IANM/IANO, DAA, or CA. As an IAM-II or IASAE I/II/III designee, you must comply with this requirement to remain “trained and certified”. Failure to complete refresher training will reflect negatively on organizational reporting and require that you be removed from your IA duties. Completing these and other security-related courses allows CISSP personnel to post these training hours, towards their annual CPE requirements. Be sure to maintain electronic or paper records of training or other creditable activity on hand, since (ISC)2 randomly audits members to ensure the continued integrity of the credential.

Table 9 – Minimum IA Refresher Training

<i>IA Refresher Training Opportunities</i>	
Completion of any series of modules from the requirements at the current or next-higher level of the IAM/IAT path.	Completion of Army E-Learning IA customer Path Phase I – GIAC Security Fundamentals (15 modules; 3-5 working days)
Completion of Army E-Learning IA Custom Path Phase II – IDO 470 Security (CIWSP) Professional (5 modules; 2-3 working days)	Attendance at an Army, other DoD Component or DoD IA Workshop



Step 10 – Certification Sustainment Training *(Continued)*

What if I want to get certified at a lower IAM/IAT level?

Depending upon availability of training funding, voucher availability, and IAM/IAPM endorsement, personnel may seek to achieve additional certification at the same level or a higher level. Contact your IAM for more information.

What if there are no additional, higher-level vouchers available?

Even if training funding and/or vouchers are unavailable based on the current demand, personnel can still utilize the Army E-Learning courses designed to prepare personnel for these certifications. Personnel always have the option to fund the higher-level certification exam on their own. Doing so demonstrates personal initiative and interest in career development. Having access to Army E-Learning alone can save thousands of dollars that independent candidates normally spend on books, computer based training, and other training materials! This makes the cost of the actual exam a minimal amount to invest in one's own future!

Where do I look for information regarding lower-level IAM/IAT requirements?

Those who wish to become certified at a lower or higher level than IAT-II may refer to the Fort Buchanan DOIM's "A Roadmap to IT Certification – So You Want to be a CompTIA A+ Professional" or "A Roadmap to IT Certification – So You Want to be a CompTIA Security Professional" for additional IAM/IAT training and certification overviews. Additionally, the Army BBP and DoD 8570.01-M list additional IT certifications that personnel may find useful in planning career progression and maximizing developmental opportunities.



Appendix A - References

- (a) IA Best Business Practice (BBP) #05-PR-M-0002, dated 09 Mar 07
- (b) Army Transition Plan for the Training and Certification Tracking System, Version 1.1, dated 17 Oct 07
- (c) AR 25-2 – Information Assurance, dated 14 November 2003.
- (d) DoD Directive 8570.1 (DoDD 8570.1) Information Assurance Training, Certification, and Workforce Management, 15 August 2004.
- (e) DoD 8570.01-M – Information Assurance Workforce Improvement Program, dated 19 December 2005.
- (f) Memorandum: Manpower and Reserve Affairs, Payment of Expenses to Obtain Professional Credentials for Army Civilian Employees, dated 20 June 2003.
- (g) DoD Instruction 8500.2, “Information Assurance (IA) Implementation,” February 6, 2003
- (h) Section 3544 of title 44 US Code, (as added by the Federal Information Security Management Act (FISMA) of 2002)
- (i) Title 29, Code of Federal Regulations, section 1607, current edition
- (j) Office of Personnel Management Job Family Position Classification Standard for Administrative Work in the Information Technology Group, GS-2200; IT Management, GS-2210, May 2001, revised August 2003
- (k) DoD Directive 8500.1, “Information Assurance (IA),” October 24, 2002
- (l) DoD Directive O-8530.1, “Computer Network Defense (CND),” January 8, 2001
- (m) DoD 5200.2-R, “Personnel Security Program,” January 1987
- (n) DoD Instruction 8510.01, “DoD Information Assurance Certification and Accreditation Process (DIACAP),” 28 November 2007
- (o) Section 2224 of title 10, United States Code. “Defense Information Assurance Program”
- (p) Section 278g-3 of title 15, US Code, (as added by the Computer Security Act of 1987)
- (q) Office of Management and Budget Circular A-130, “Management of Federal Information Resources, Transmittal Memorandum No. 4,” Appendix 3, November 30, 2000
- (r) DoD Directive 1000.25, “DoD Personnel Identity Protection (PIP) Program,” July 19, 2004
- (s) DoD Instruction 7730.64, “Automated Extracts of Manpower and Unit Organizational Element Files,” December 11, 2004



Appendix A - References (Continued)

- (t) DoD Instruction 1336.5, "Automated Extract of Active Duty Military Personnel Records," May 2, 2001
- (u) DoD Instruction 7730.54, "Reserve DoD Components Common Personnel Data System (RCCPDS)," August 6, 2004
- (v) DoD Instruction 1444.2, "Consolidation of Automated Civilian Personnel Records," September 16, 1987
- (w) DoD 8910.1-M, "DoD Procedures for Management of Information Requirements," June 30, 1998
- (x) Director of Central Intelligence Directive 6/3, "Protecting Sensitive Compartmented Information within Information Systems", June 5, 1999
- (y) Committee on National Security Systems Instruction No. 4009, "National Information Security System Glossary," as revised May 2003
- (z) International Standards Organization/International Electronics Commission (ISO/IEC) 17024, "General Requirements for Bodies Operating Certification of Persons," April 2003
- (aa) DoD 5500.7-R, "DoD Joint Ethics Regulation," August 1, 1993
- (bb) DoD 1400.25-M Subchapter 1920, "Classification" April 28, 2006



to Successful IA Training and Certification for IAM-II Personnel

Appendix B - Acronyms

Table 10 – Common IA-related Acronyms

Acronym	Meaning	Acronym	Meaning
ATC	Army Training and Certification	CND-IR	Computer Network Defense Incident Responder
A&VTR	Asset and Vulnerability Tracking Resource	CND-SP	Computer Network Defense Service Provider
BBP	Best Business Practice	CND-SPM	Computer Network Defense Service Provider Manager
C&A	Certification and Accreditation	CompTIA	Computing Technology Industry Association
CBT	Computer Based Training	COOP	Continuity of Operations Plan
CE	Computing Environment	DA	Department of Army
CIO	Chief Information Officer	DAA	Designated Approving Authority
CISSP	Certified Information Systems Security Professional	DIAP	Defense-wide Information Assurance Program
CND	Computer Network Defense	DIACAP	Defense Information Assurance Certification and Accreditation Process
CND-A	Computer Network Defense Analyst	DoD	Department of Defense
CND-AU	Computer Network Defense Auditor	FISMA	Federal Information Security Management Act
CND-IS	Computer Network Defense Infrastructure Support	GIG	Global Information Grid



to Successful IA Training and Certification for IAM-II Personnel

Appendix B - Acronyms (Continued)

Table 10 – Common IA-related Acronyms

Acronym	Meaning	Acronym	Meaning
IA	Information Assurance	IAT-III	Information Assurance Technical Level III
IAM	Information Assurance Management/ Manager	IAVA	Information Assurance Vulnerability Alert
IAM-I	Information Assurance Management Level I	IAVB	Information Assurance Vulnerability Bulletin
IAM-II	Information Assurance Management Level II	IAVM	Information Assurance Vulnerability Management
IAM-III	Information Assurance Management Level III	IA WIPAC	Information Assurance Workforce Improvement Program Advisory Council
IANM	Information Assurance Network Manager	INFOCON	Information Operations Condition
IASE	Information Assurance Support Environment (DoD IA Portal)	INFOSEC	Information Security
IASO	Information Assurance Security Officer	IS	Information System
IAT	Information Assurance Technical	ISC2	International Information Security Certification Consortium
IAT-I	Information Assurance Technical Level I	ISSO	Information Systems Security Officer
IAT-II	Information Assurance Technical Level II	IT	Information Technology



to Successful IA Training and Certification for IAM-II Personnel

Appendix B - Acronyms (Continued)

Table 10 – Common IA-related Acronyms

Acronym	Meaning	Acronym	Meaning
NE	Network Environment	OPM	Office of Personnel Management
NIPRNet	Non-classified Internet Protocol Router Network	OS	Operating System
OJT	On the Job Training	OSD	Office of the Secretary of Defense
OMB	Office of Management and Budget	SIPRNet	Secret Internet Protocol Router Network

Appendix C – IAM/IAT and Speciality Level Descriptions¹

Table 11 – IAM/IAT/Specialty Level Descriptions

IAM/IAT/ IASAE/CND- SP Level	Experience in IA or Related Field	System Environment	Knowledge	Supervision	IA Certification & OS Certification
IAM-I	Normally possesses at least (5) years of management experience.	CE IAM (e.g. ISSO/IASO)	Applies knowledge of IA policy, procedures, and structure to develop, implement, and maintain a secure CE.	Typically reports to IAM Level II.	Within (6) months of assignment to position.
IAM-II	Normally possesses at least (5) years of management experience.	NE IAM (e.g. Installation or Organizational IAM)	Applies knowledge of IA policy, procedures, and workforce structure to develop, implement, and maintain a secure NE.	Typically reports to IAM Level III (Enclave) Manager or DAA.	Within (6) months of assignment to position.
IAM-III ³	Normally possesses at least (10) years of management experience.	Enclave Environment IAM (e.g. Regional IAPM)	Applies knowledge of IA policy, procedures, and workforce structure to develop, implement, and maintain a secure enclave environment.	Typically reports to the DAA.	Within (6) months of assignment to position.
CND-SP ³	Contains (5) subcategories which require varying levels of experience, system environments, knowledge, and supervision. Refer to DoD 8570.01-M for detailed information regarding individual requirements.				

¹ Information extracted from categories established and detailed in DoD 8570.01-M, dated 15 May 2008.

² Personnel may simultaneously be categorized in IAM/IAT levels and IASAE/CND-SP categories and, as a result, be required to obtain separate certifications to fulfill minimum requirements.

³ IAM/IAT-III, CND-SP and IASAE-I and III requirements do not exist at the Buchanan DOIM level.

Appendix C – IAM/IAT and Speciality Level Descriptions¹ (Continued)

Table 11 – IAM/IAT/Specialty Level Descriptions

IAM/IAT/ IASAE/CND- SP Level	Experience in IA or Related Field	System Environment	Knowledge	Supervision	IA Certification & OS Certification
IAT-I	Minimum of (0-5) years	CE (e.g. Desktop Support Technician)	Applies basic knowledge of IA concepts, practices and procedures within the CE.	Works under supervision and typically reports to a CE manager.	Within (6) months of assignment to position and mandatory for unsupervised privileged access.
IAT-II	Minimum of (3-7) years	NE & advanced CE (e.g. System or Network Administrator)	Mastery of the functions of the IAT Level I position. Applies knowledge and experience with IA concepts, practices, and procedures within the NE.	Works under supervision and typically reports to a NE manager.	Within (6) months of assignment to position and mandatory for unsupervised privileged access.
IAT-III ³	Minimum of (7) years	Enclave Environment, advanced NE, and advanced CE	Expert in all functions of IAT Level I/II positions.	May lead and direct the work of others. Typically reports to an enclave manager.	Within (6) months of assignment to position and mandatory for unsupervised privileged access.
IASAE-II ^{2,3}	Minimum of (5) years	NE Architecture and Engineering	Applies knowledge of IA policy, procedures, and workforce structure to design, develop, and implement secure NE.	Typically reports to IASAE Level III, IAM, or DAA	Within (6) months of assignment to position and mandatory for unsupervised privileged access.

¹ Information extracted from categories established and detailed in DoD 8570.01-M, dated 15 May 2008.

² Personnel may simultaneously be categorized in IAM/IAT levels and IASAE/CND-SP categories and, as a result, be required to obtain separate certifications to fulfill minimum requirements.

³ IAM/IAT-III, CND-SP and IASAE-I and III requirements do not exist at the Buchanan DOIM level.



to Successful IA Training and Certification for IAM-II Personnel

Appendix D - Government and Commercial IT Certification-Related Websites

1. **Army Training & Certification Tracking System (ATC)** – Army website dedicated to tracking certification compliance. Used to create, review, and update the status of the training and certification progress of IA personnel. – <https://atc.us.army.mil>
2. **Army E-Learning** – Central repository of SkillSoft Computer Based Training courses, licensed for use by U.S. Army personnel. - <https://usarmy.skillport.com/SkillPortFE/login/usarmylogin.cfm>
3. **Books 24x7** – Electronic Library available through link on Army E-Learning website that contains multiple certification study-related publications. - <https://usarmy.skillport.com>
4. **U.S. Army IA Virtual Training** – Army website containing information security-related, computer-based training. – <https://iatraining.us.army.mil>
5. **CERT Virtual Training Environment (VTE)** – Carnegie Mellon website that provides information security-related, computer-based training to DoD personnel free of charge. Registration required from a computer with .mil address. - <https://www.vte.cert.org>
6. **CompTIA Government** – Contains information regarding CompTIA's partnership with the U.S. Government certification initiative - http://certification.comptia.org/resources/US_Gov.aspx
7. **CompTIA A+ Overview** – Contains official information regarding the CompTIA A+ certification. - <http://certification.comptia.org/a/>
8. **CompTIA A+ Sample Questions** – Official sample questions from the CompTIA website. Requires demographic data input, prior to being provided access. - http://certification.comptia.org/resources/practice_test.aspx

Disclaimer: Links to Non-U.S. Government websites are provided for reference purposes only and do not constitute specific endorsements of the website, its content, or links to external websites.



Appendix D - Government and Commercial IT Certification-Related Websites (Continued)

9. **CompTIA Security+ Overview** – Contains official information regarding the CompTIA Security+ certification. - <http://certification.comptia.org/security/default.aspx>

10. **CompTIA Security+ Sample Questions** – Official sample questions from the CompTIA website. Requires demographic data input, prior to being provided access. - http://certification.comptia.org/resources/practice_test.aspx

11. **International Security Consortium (ISC2)** – Official ISC2 website with information regarding the CISSP and related certifications. – <http://www.isc2.org>

12. **About.com Computer Certification** – Page within the About.com website that contains general information regarding the Computer Certification process. (Unofficial source not endorsed by or affiliated with CompTIA, ISC2, or other certification organizations.) - <http://certification.about.com/od/entrylevelcertification1/a/studytips.htm>

13. **Wikibooks** – Free electronic library which provides search queries to publicly available publications. (Unofficial source not endorsed by or affiliated with CompTIA, ISC2, or other certification organizations.) - <http://wikibooks.org>

14. **CCcure Website** – Site dedicated to CISSP and other ISC2-related certifications. Includes comprehensive CISSP examination overview, comprehensive testing engine, and other study materials. Requires free account registration. - <http://www.cccure.org/>

Disclaimer: Links to Non-U.S. Government websites are provided for reference purposes only and do not constitute specific endorsements of the website, its content, or links to external websites.